

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1-6. (Canceled)

7. (Currently Amended) An ion attachment mass spectrometry apparatus causing positively charged metal ions to attach to analyte molecules to be measured in an attachment region to generate attached ions and then performing mass spectrometry on said attached ions by a mass spectrometer, comprised of:

a metal ion emitter for emitting said metal ions to said attachment region,

an introduction unit for introducing said analyte molecules into said attachment region,

~~a metal ion attachment inhibiting unit~~ means for inhibiting attachment of said metal ions to ~~specific~~ one or more groups of molecules in said attachment region, and

a mass spectrometer for performing said mass spectrometry.

8. (Currently Amended) The ion attachment mass spectrometry apparatus as set forth in claim 1, wherein said metal ion attachment inhibiting unit means includes means for selectively heating only said ~~specific~~ one or more groups of molecules.

9. (Currently Amended) The ion attachment mass spectrometry apparatus as set forth in claim 8, wherein said means for selectively heating only said specific molecules is a means for emitting electromagnetic waves having a

frequency matching an absorption band of said ~~specific~~ one or more groups of molecules.

10. (Currently Amended) The ion attachment mass spectrometry apparatus as set forth in claim 9, wherein the frequency of said electromagnetic waves matches an absorption band of said ~~specific~~ one or more groups of molecules, but does not match any absorption band of said analyte molecules.

11. (Canceled)

12. (Currently Amended) The ion attachment mass spectrometry apparatus as set forth in claim 7, wherein said ~~specific~~ one of said groups of molecules are H<sub>2</sub>O molecules.

13. (New) An ion attachment mass spectrometry apparatus causing positively charged metal ions to attach to analyte molecules to be measured in an attachment region to generate attached ions and then performing mass spectrometry on said attached ions by a mass spectrometer, comprised of:

a metal ion emitter for emitting said metal ions to said attachment region,

an introduction unit for introducing said analyte molecules into said attachment region,

a heater for inhibiting attachment of said metal ions to one or more groups of molecules in said attachment region, and

a mass spectrometer for performing said mass spectrometry.

14. (New) The ion attachment mass spectrometry apparatus as set forth in claim 13, wherein said heater includes means for selectively heating only said one or more groups of molecules.

15. (New) The ion attachment mass spectrometry apparatus as set forth in claim 14, wherein said means for selectively heating only said specific molecules is a means for emitting electromagnetic waves having a frequency matching an absorption band of said one or more groups of molecules.

16. (New) The ion attachment mass spectrometry apparatus as set forth in claim 15, wherein the frequency of said electromagnetic waves matches an absorption band of said one or more groups of molecules, but does not match any absorption band of said analyte molecules.

17. (New) The ion attachment mass spectrometry apparatus as set forth in claim 7, wherein at least one of said groups of molecules are H<sub>2</sub>O molecules.